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CLAIMS:

1. (previously presented) A method of manufacturing an insulated component, the method comprising:
 - providing a substrate having a surface;
 - depositing a layer of ceramic insulating material on the substrate surface; and
 - forming a continuous gap in a top surface of the layer of ceramic insulating material to define segments therein, the continuous gap having a width at the top surface of less than 100 microns;
 - further comprising forming the continuous gap by:
 - exposing the top surface to a first pass of laser energy having a first parameter to form the continuous gap; and
 - exposing the continuous gap to a second pass of laser energy having a second parameter different than the first parameter to change a geometry of the continuous gap.
2. (original) The method of claim 1, further comprising forming the continuous gap to have a width of less than 75 microns.
3. (original) The method of claim 1, further comprising forming the continuous gap to have a width of less than 50 microns.
4. (original) The method of claim 1, further comprising forming the continuous gap to have a depth that does not extend through an entire thickness of the layer of ceramic insulating material.
5. (original) The method of claim 1, further comprising forming the continuous gap using a laser engraving process.

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6. (previously presented) The method of claim 1, further comprising:
forming a first plurality of continuous gaps to a first depth into the top surface;
and

forming a second plurality of continuous gaps to a second depth different than
the first depth into the top surface.

7. (cancelled).

8. (previously presented) The method of claim 1, wherein the second pass
of laser energy has a wider beam footprint than that of the first pass of laser energy.

9. (previously presented) The method of claim 1, wherein the second pass
of laser energy has a pulsation frequency that is greater than that of the first pass of
laser energy.

10. (original) The method of claim 1, further comprising forming the
continuous gap using laser energy delivered through a fiber optic cable.

11. (original) The method of claim 1, further comprising forming the
continuous gap with a laser engraving process using a lens having a focal length of at
least 160 mm in order to reduce accumulation of molten material splashed onto the
lens during the laser engraving process.

12. (cancelled).

13. (original) The method of claim 1, further comprising forming a plurality of
continuous gaps in the top surface at a spacing between adjacent gaps of less than
750 microns.

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14. (original) The method of claim 13, further comprising forming the plurality of continuous gaps in the top surface at a spacing between adjacent gaps of less than 500 microns.

15. (original) The method of claim 13, further comprising forming the plurality of continuous gaps in the top surface at a spacing between adjacent gaps in a range of 500-750 microns.

16. (previously presented) The method of claim 1 further comprising:
providing a substrate having a surface;
depositing a first layer of ceramic insulating material on the substrate surface;
forming a first plurality of continuous gaps in a top surface of the first layer;
depositing a second layer of ceramic insulating material on the top surface of the first layer; and
forming a second plurality of continuous gaps in a top surface of the second layer.

17. (original) The method of claim 16, further comprising forming each of the gaps in the top surface of the second layer to have a width at the top surface of less than 100 microns.

Claims 18-35 (cancelled).

36. (previously presented) The method of claim 16, wherein the first plurality of continuous gaps defines a preferential failure interface between the layers of ceramic insulating material, and further comprising depositing the second layer of ceramic insulating material to a critical depth selected to allow the deposited ceramic insulating material to spall along the preferential failure interface in response to an expected thermal transient in order to present a fresh layer of the ceramic insulating material to a surrounding high temperature environment.

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37. (previously presented) The method of claim 1, further comprising exposing the continuous gap to the second pass of laser energy to widen a bottom of the gap into a generally U-shaped bottom geometry.

38. (cancelled).

39. (cancelled).